

In the Claims

1. (Currently amended) A method for controlling the power of a motor, comprising the steps of:

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- (a) applying power to a spindle motor to engage a start-up sequence;
 - (b) monitoring the amount of at least one of a current and a voltage applied to the spindle motor;
 - (c) obtaining a control voltage proportional to one of the applied current and the applied voltage; and
 - (d) removing the power from the spindle motor if the control voltage exceeds a predetermined voltage threshold.

2. (Canceled)

3. (Currently amended) The method of claim 21 wherein the predetermined voltage threshold corresponds to a preprogrammed start-up disc profile.

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4. (Original) The method of claim 1 wherein step (c) further comprises obtaining the control voltage by integrating a voltage across a current sensing resistor.

5. (Original) The method of claim 1 wherein step (a) further comprises the steps of:

- (a)(i) enabling the calibrating of the predetermined voltage threshold.

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6. (Previously amended) The method of claim 5, wherein step (a)(i) further comprises the steps of:

(a)(ii) applying a signal from a digital-to-analog converter (DAC) to the input of a comparator;

(a)(iii) applying a finite specific reference signal to simulate the monitoring of one of the current and voltage applied to the spindle motor; and

(a)(iv) adjusting the signal from the DAC to compensate for offsets of the circuitry.

7. (Previously amended) The method of claim 1 further comprising the step of:

- (e) waiting a fixed period of time;
- (f) reapplying power to the motor; and
- (g) repeating steps (b) - (g).

8. (Currently amended) A method for controlling ~~the~~ a current drawn by a spindle motor from a power supply, the power supply intended to provide power to the spindle motor in a computer system by a spindle motor, comprising the step of decoupling the power supply from the spindle motor if a control voltage exceeds a predetermined voltage threshold.

Claims 9-12 were previously canceled.

13. (Currently amended) A data storage device, comprising:

- at least one spindle motor;
- a power supply electrically coupleabled to the spindle motor; and
- a spindle motor controller, ~~wherein the spindle motor controller~~ adapted to measures power and, if a threshold value is at least met, decouples the power to the spindle motor.

14. (Original) The data storage device of claim 13 wherein the spindle motor controller further comprises:

- a driver control function programmed into the motor controller which disables a spindle motor driver for a fixed period of time.

b6 15. (Previously amended) The data storage device of claim 13 wherein the spindle motor controller decouples power when a control voltage, proportional to at least one of a motor current and motor voltage, is at least equal to a threshold voltage.

b7 16. (Currently amended) The data storage device of claim 14 wherein the driver control function is enabled when a signal proportional to a current applied to the spindle motor exceeds a the predetermined threshold value.

b8 17. (Previously amended) The data storage device of claim 16 wherein the power supply is coupled to the spindle motor for at least one of a start-up sequence and a run sequence.

Claims 18-30 were previously canceled.

b9 31. (New) A method comprising the step of removing power from a motor when a reference value is at least matched to reduce current spikes on a power supply.

32. (New) The method of claim 31 wherein the current spikes are high frequency.

33. (New) The method of claim 31 wherein the motor is a spindle motor.
